

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of _____ : **BOX PATENT APPLICATION**

Elsa JOLIMAITRE et al. : Examiner: Unassigned

Serial No.: Unassigned : Group Art Unit: Unassigned

Filed: August 24, 2001

For: PROCESS FOR SEPARATING MULTIBRANCHED PARAFFINS USING A ZEOLITIC ADSORBENT WITH A MIXED STRUCTURE

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination, Applicants wish to amend the above-identified application as indicated below:

IN THE ABSTRACT

Please delete the existing abstract and replace with the attached Abstract of the Disclosure.

IN THE CLAIMS

Please cancel claims 3-18 without prejudice or disclaimer.

Please add the following new claims:

19. A separation process according to claim 1, wherein said zeolitic adsorbent is a zeolite with structure type EUO.

20. A separation process according to claim 1, wherein said zeolitic adsorbent is a zeolite with structure type NES.

21. A separation process according to claim 1, wherein said zeolitic adsorbent is a zeolite with structure type MWW.

22. A separation process according to claim 1, wherein said zeolitic adsorbent is a NU-85 zeolite.

23. A separation process according to claim 1, wherein said zeolitic adsorbent is a NU-86 zeolite.

24. A separation process according to claim 1, wherein said zeolitic adsorbent comprises a zeolite with a EUO, NES, or MWW structure, or an NU-85 or NU-86 zeolite, said zeolitic adsorbent being mixed with a zeolite type LTA.

25. A separation process according to claim 1, wherein said hydrocarbon feed originates from atmospheric distillation of crude petroleum.

26. A separation process according to claim 1, wherein said hydrocarbon feed originates from a reforming unit.

27. A separation process according to claim 1, said hydrocarbon feed originates from a conversion unit.

28. A separation process according to claim 1, comprising fractionating said hydrocarbon feed into at least two distinct effluents, at least one of which is rich in multibranched paraffins and optionally in aromatic and naphthenic compounds.

29. A separation process according to claim 1, comprising fractionating said hydrocarbon feed into three distinct effluents, an effluent that is rich in linear paraffins, an effluent that is rich in monobranched paraffins and an effluent that is rich in multibranched paraffins and optionally in aromatic and naphthenic compounds.

30. A process according to claim 1, wherein at least one light fraction is separated by distillation upstream or downstream of the separation unit.

31. A process according to claim 1, wherein feed contains a C5 cut and at least one deisopentaniser and/or at least one depentaniser is/are located upstream or downstream of the separation unit.

32. A separation process according to claim 30, wherein said light fraction or isopentane and/or pentane and/or a mixture of the two substances acts as an eluant to implement separation.

33. A separation process according to claim 1, wherein separation is carried out in the liquid phase at a temperature in the range 50°C to 250°C and at a pressure in the range 0.1 to 7 MPa.

34. A separation process according to claim 1, wherein separation is carried out in the gas phase at a temperature in the range 150°C to 450°C and at a pressure in the range 0.01 to 7 MPa. —

REMARKS

A principal purpose of this Preliminary Amendment is to remove multiply dependent claims, thereby facilitating examination and saving fees, Applicants reserving the right to reintroduce claims to cancelled combined subject matter. New claims 19-34 substantially correspond to cancelled claims 3-18. Claim 8, however is modified by introducing a Markush group of the adsorbents from original claims 3-7.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned “**Version With Markings To Show Changes Made**”.

Respectfully submitted,



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ABSTRACT OF THE DISCLOSURE

A process for separating multibranched paraffins comprised in a hydrocarbon feed comprising hydrocarbons containing 5 to 8 carbon atoms per molecule comprises a separation unit functioning by adsorption and contains at least one zeolitic adsorbent with a mixed structure with principal channels with openings defined by a ring containing 10 oxygen atoms and secondary channels with openings defined by a ring of at least 12 oxygen atoms, the secondary channels only being accessible to the feed to be separated via the principal channels. Particular zeolitic adsorbents of the invention are zeolites with structure types EUO, NES and MWW. NU-85 and NU-86 zeolites are also particularly suitable for carrying out the process of the invention.

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